



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-6414; Directorate Identifier 2015-NM-175-AD; Amendment 39-18633; AD 2016-18-03]

RIN 2120-AA64

Airworthiness Directives; Bombardier, Inc. Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Bombardier, Inc. Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes. This AD was prompted by two in-service incidents of a loss of all air data information in the flight deck. This AD requires a revision of the airplane flight manual (AFM) emergency procedures section to provide procedures to guide the crew on how to stabilize the airplane airspeed and attitude for continued safe flight when a loss of all air data information has occurred in the flight deck. We are issuing this AD to prevent loss of control when a loss of all air data information has occurred in the flight deck.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514-855-7401; email thd.crj@aero.bombardier.com; Internet <http://www.bombardier.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-6414.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-6414; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (telephone 800-647-5527) is Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Assata Dessaline, Aerospace Engineer, Avionics and Services Branch, ANE-172, FAA, New York Aircraft

Certification Office (ACO), 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7301; fax 516-794-5531.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Bombardier, Inc. Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes. The NPRM published in the Federal Register on May 10, 2016 (81 FR 28764) (“the NPRM”). The NPRM was prompted by two in-service incidents of a loss of all air data information in the flight deck. The NPRM proposed to require a revision of the AFM emergency procedures section to provide procedures to guide the crew on how to stabilize the airplane airspeed and attitude for continued safe flight when a loss of all air data information has occurred in the flight deck. We are issuing this AD to prevent loss of control when a loss of all air data information has occurred in the flight deck.

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian Airworthiness Directive CF-2015-12, dated June 23, 2015 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain Bombardier, Inc. Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes. The MCAI states:

Two in-service incidents have been reported on CL-600-2C10 aeroplanes regarding a loss of all air data information in the cockpit. The air data information was recovered as the aeroplane descended to lower altitudes. An investigation determined that the root cause in both events

was high altitude icing (ice crystal contamination). If not addressed, this condition may affect continued safe flight.

Due to similarities in the air data systems, such events could happen on all Bombardier CRJ models, CL-600-2B19, CL-600-2C10, CL-600-2D15, CL-600-2D24 and CL-600-2E25. Therefore, the corrective actions for these models will be mandated once their respective Airplane Flight Manual (AFM) revisions become available.

This [Canadian] AD mandates the incorporation of AFM procedures to guide the crew to stabilize the aeroplane's airspeed and attitude for continued safe flight.

You may examine the MCAI in the AD docket on the Internet at

<http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-6414.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comment received on the NPRM and the FAA's response to that comment.

Request to Determine Root Cause of Unsafe Condition

The Airline Pilots Association International (ALPA) requested further investigation and system modifications for the ice crystal contamination. ALPA stated that although the NPRM proposed an amendment to the AFM procedures for the crew, it does not believe that this AFM procedure addresses the root cause of the unsafe condition.

The Air Line Pilots Association stated that the AFM revision will not address the root cause of the high-altitude icing (ice crystal contamination), and requested that further

investigation be done for the ice crystal contamination issue and remedies be provided in addition to the AFM amendments.

We agree that the AFM revision will not address the root cause of the high-altitude icing (ice crystal contamination). The manufacturer is investigating the issue, but there is no timetable for a final resolution. Should the manufacturer develop modifications to prevent this problem, the FAA will consider further rulemaking. The incorporation of the AFM procedures is meant to be used to guide the crew on how to stabilize the airplane airspeed and altitude for continued safe flight in icing conditions. However, further investigation into this matter extends beyond the scope of this AD.

Conclusion

We reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting this AD as proposed except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

Related Service Information under 1 CFR part 51

Bombardier, Inc. has issued Section 03-19, “Unreliable Airspeed,” of Chapter 3, “Emergency Procedures,” in the Bombardier CRJ Series Regional Jet Model CL-600-2B19 Airplane Flight Manual CSP A-012, Revision 64B, dated December 8, 2015. The service information describes procedures to guide the crew to stabilize the airplane’s airspeed and attitude for continued safe flight when a loss of all air data information has

occurred in the flight deck. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

We estimate that this AD affects 500 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

Estimated costs				
Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Revision	1 work-hour X \$85 per hour = \$85	\$0	\$85	\$42,500

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. “Subtitle VII: Aviation Programs,” describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in “Subtitle VII, Part A, Subpart III, Section 44701: General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products

identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2016-18-03 Bombardier, Inc.: Amendment 39-18633; Docket No. FAA-2016-6414; Directorate Identifier 2015-NM-175-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Bombardier, Inc. Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes, certificated in any category, serial numbers 7003 and subsequent.

(d) Subject

Air Transport Association (ATA) of America Code 34, Navigation.

(e) Reason

This AD was prompted by two in-service incidents of a loss of all air data information in the flight deck. We are issuing this AD to prevent loss of control when a loss of all air data information has occurred in the flight deck.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Airplane Flight Manual (AFM) Revision

Within 30 days after the effective date of this AD, revise the emergency procedures section of the AFM by incorporating Section 03-19, “Unreliable Airspeed”, of Chapter 3, “Emergency Procedures,” in the Bombardier CRJ Series Regional Jet Model CL-600-2B19 Airplane Flight Manual CSP A-012, Revision 64B, dated December 8, 2015.

(h) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York Aircraft Certification Office (ACO), ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the ACO, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, New York ACO, ANE-170, FAA; or Transport Canada Civil Aviation (TCCA); or Bombardier, Inc.’s TCCA Design Approval Organization (DAO). If

approved by the DAO, the approval must include the DAO-authorized signature.

(i) Related Information

Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian Airworthiness Directive CF-2015-12, dated June 23, 2015, for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-6414.

(j) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Section 03-19, “Unreliable Airspeed,” of Chapter 3, “Emergency Procedures,” in the Bombardier CRJ Series Regional Jet Model CL-600-2B19 Airplane Flight Manual CSP A-012, Revision 64B, dated December 8, 2015.

(ii) Reserved.

(3) For service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514-855-7401; email thd.crj@aero.bombardier.com; Internet <http://www.bombardier.com>.

(4) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:
<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on August 19, 2016.

Dorr M. Anderson,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

[FR Doc. 2016-20826 Filed: 8/31/2016 8:45 am; Publication Date: 9/1/2016]